

The influence of work from home and work-life balance on job satisfaction mediated by work stress at the regional development planning agency (Bappeda) of South Tapanuli Regency

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ABSTRAK

Penelitian ini bertujuan menganalisis pengaruh *Work From Home* (WFH) dan *Work-Life Balance* (WLB) terhadap kepuasan kerja dengan stres kerja sebagai variabel mediasi pada pegawai Badan Perencanaan Pembangunan Daerah (Bappeda) Kabupaten Tapanuli Selatan. Penelitian menggunakan pendekatan kuantitatif dengan desain survei *cross-sectional*. Seluruh populasi sebanyak 72 pegawai dijadikan responden melalui teknik sampling jenuh. Data dianalisis menggunakan *Partial Least Squares Structural Equation Modeling* (PLS-SEM) dengan SmartPLS 4.0. Hasil penelitian menunjukkan bahwa WFH berhubungan positif dan signifikan dengan kepuasan kerja dengan koefisien jalur 0,267 dan p-value 0,021, sedangkan WLB menunjukkan hubungan positif dan signifikan dengan koefisien 0,341 dan p-value 0,004. WFH dan WLB berhubungan negatif dan signifikan dengan stres kerja, sementara stres kerja berhubungan negatif dengan kepuasan kerja. Stres kerja terbukti memediasi secara parsial hubungan WFH dan WLB dengan kepuasan kerja, dengan efek tidak langsung masing-masing sebesar 0,093 dan 0,116. Model mampu menjelaskan 71,2% variasi kepuasan kerja. Temuan ini menegaskan pentingnya pengaturan kerja fleksibel, keseimbangan kehidupan kerja, dan pengelolaan stres dalam meningkatkan kepuasan kerja pegawai sektor publik.

Kata Kunci: work from home; work-life balance; stres kerja; kepuasan kerja; sektor publik

ABSTRACT

This study examines the relationships between Work From Home (WFH), Work-Life Balance (WLB), and Job Satisfaction, with Work Stress acting as a mediating variable among employees of the Regional Development Planning Agency (Bappeda) of South Tapanuli Regency. A quantitative cross-sectional survey design was employed, involving the entire population of 72 employees through a saturated sampling approach. Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. The results show that WFH was positively and significantly associated with Job Satisfaction, with a path coefficient of 0.267 and a p-value of 0.021, while WLB showed a positive and significant relationship with a coefficient of 0.341 and a p-value of 0.004. WFH and WLB were negatively associated with Work Stress, whereas Work Stress was negatively associated with Job Satisfaction. Work Stress partially mediated the relationships of WFH and WLB with Job Satisfaction, with indirect effects of 0.093 and 0.116, respectively. The model explained 71.2% of the variance in Job Satisfaction. These findings highlight the importance of flexible work arrangements, work-life balance, and effective stress management in supporting employee satisfaction in public-sector organizations.

Keywords: work from home; work-life balance; work stress; job satisfaction; public sector

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1. INTRODUCTION

The transformation of work arrangements triggered by the COVID-19 pandemic has significantly changed organizational practices in both the public and private sectors. One of the most prominent changes has been the widespread implementation of Work From Home (WFH), a flexible work arrangement that enables employees to perform their responsibilities from home or other locations outside the conventional office through the use of digital technology (Purwanto et al., 2020; Mungkasa, 2020). WFH offers several potential benefits, including reduced commuting time, greater work autonomy, and increased flexibility. However, remote work may also create challenges related to blurred work–life boundaries, social isolation, technological demands, and difficulties in coordinating work tasks. These conditions may influence employees' psychological well-being and their ability to maintain a healthy balance between work and personal life (Allen et al., 2015; Shirmohammadi et al., 2022; Khan et al., 2022).

In this context, Work-Life Balance (WLB) has become an increasingly important organizational issue. WLB refers to the extent to which individuals are able to balance the demands and responsibilities of work and non-work domains in a satisfactory manner (Greenhaus et al., 2003). The implementation of flexible and remote working arrangements may provide employees with greater control over their time, but it may also intensify the overlap between professional and personal roles when organizational support and boundaries are inadequate. Shirmohammadi et al. (2022) emphasized that remote work can create both opportunities and challenges for work-life balance, while Kismono et al. (2023) showed that work-life balance and job stress represent important mechanisms in explaining employees' experiences under a work-from-home regime. Therefore, maintaining an appropriate balance between professional and personal responsibilities is particularly relevant in understanding employees' well-being and work-related attitudes in the post-pandemic workplace.

One important outcome associated with these working conditions is Job Satisfaction. Job satisfaction reflects an employee's positive or negative affective evaluation of their work and various aspects of the job (Robbins & Judge, 2019). In organizational settings, higher job satisfaction is associated with more favorable employee attitudes, organizational commitment, and work-related outcomes. Recent studies have also emphasized the importance of job satisfaction in explaining the relationship between quality of work life and other organizational outcomes (Aras et al., 2025). Within public-sector institutions, job satisfaction is particularly relevant because employee attitudes and well-being may influence the effectiveness with which public responsibilities and services are carried out.

Work Stress is another important factor in understanding the relationship between work arrangements and job satisfaction. According to the Job Demands–Resources perspective, stress may arise when work demands exceed the resources available to employees to perform their responsibilities effectively (Bakker & Demerouti, 2017). In remote and flexible work settings, technological demands, work-family interference, communication difficulties, and blurred boundaries between work and personal life may increase psychological pressure. Rahman and Singh (2024), for example, demonstrated that technostress among post-pandemic remote workers is closely related to work-family conflict and work exhaustion. Conversely, arrangements that provide greater flexibility and support employees' ability to manage work and personal responsibilities may reduce work-related stress and contribute to more positive work outcomes.

The relevance of these relationships is particularly important in government institutions such as the Regional Development Planning Agency (Bappeda) of South Tapanuli Regency, which performs a strategic role in regional development planning and requires employees to coordinate administrative, analytical, and planning responsibilities effectively. In the post-pandemic work environment, employees' perceptions and experiences of flexible work arrangements remain relevant for understanding how work arrangements, work-life balance, and work stress are associated with job satisfaction. Accordingly, the present study examines WFH as a flexible work arrangement within the organizational context of Bappeda South Tapanuli Regency.

Although previous studies have examined WFH, work-life balance, work stress, and job satisfaction, the mechanisms connecting these variables remain insufficiently understood across organizational settings. Previous evidence indicates that WFH may provide flexibility and autonomy while simultaneously creating work-life boundary challenges (Allen et al., 2015; Shirmohammadi et al., 2022). Studies have also shown that work-life balance and job stress are closely related to employees' psychological and work-related outcomes (Kismono et al., 2023; Rachmawati & Susanto, 2024; Henriques & Samagaio, 2025). However, relatively limited attention has been given to the role of work stress as a mediating mechanism through which WFH and WLB are associated with job satisfaction, particularly within Indonesian local-government institutions. This represents an empirical and contextual research gap because flexible work arrangements and work-life balance may not influence job satisfaction only through direct relationships, but also through their ability to reduce or intensify employees' experience of work stress.

The present study addresses this gap by examining the direct effects of WFH and WLB on job satisfaction and work stress, as well as the mediating role of work stress in the relationships between WFH,

WLB, and job satisfaction among employees of Bappeda South Tapanuli Regency. By integrating flexible work arrangements, work-life balance, work stress, and job satisfaction within a single model, this study provides empirical evidence regarding the psychological mechanism through which post-pandemic work arrangements may be associated with employee attitudes in a local-government context. Accordingly, this study aims to analyze (1) the effect of WFH on job satisfaction, (2) the effect of WLB on job satisfaction, (3) the effect of WFH on work stress, (4) the effect of WLB on work stress, (5) the effect of work stress on job satisfaction, (6) the mediating role of work stress in the relationship between WFH and job satisfaction, and (7) the mediating role of work stress in the relationship between WLB and job satisfaction.

2. LITERATURE REVIEW

A. *Work From Home (WFH)*

Work From Home (WFH) refers to a flexible work arrangement in which employees perform their professional responsibilities from home or other locations outside the conventional workplace through the use of information and communication technologies (Gajendran & Harrison, 2007; Shamir & Salomon, 1985). The concept gained substantial relevance during the COVID-19 pandemic, when remote working arrangements were widely adopted to maintain organizational operations while reducing physical interaction (Chung et al., 2021). In Indonesia, WFH was implemented across various public and private institutions and became an important component of organizational adaptation during the pandemic (Mungkasa, 2020).

WFH can provide employees with greater flexibility, reduced commuting time, and increased autonomy, which may contribute to more favorable work experiences. However, its consequences are not uniformly positive. Remote working may blur the boundaries between work and personal life and may also create challenges related to social interaction, coordination, technological demands, and role interference (Allen et al., 2015; Shirmohammadi et al., 2022). Khan et al. (2022) further highlighted the importance of organizational support in explaining employee well-being under WFH arrangements. These findings indicate that the effectiveness of WFH depends not only on the location from which employees work but also on the organizational and individual resources available to support them.

In the Indonesian context, Purwanto et al. (2020) demonstrated that WFH significantly influenced employees' work experiences during the pandemic. More recent studies on post-pandemic working arrangements also indicate that remote work remains closely connected with work-life balance, stress, and employee well-being. Therefore, WFH is relevant not only as a flexible work arrangement but also as an organizational condition that may influence job satisfaction directly and indirectly through employees' experience of work stress.

B. *Work-Life Balance (WLB)*

Work-Life Balance (WLB) refers to the extent to which individuals are able to manage the temporal, emotional, and behavioral demands of work and non-work domains in a balanced and satisfactory manner (Greenhaus et al., 2003; Kossek & Lautsch, 2018). WLB reflects employees' perceptions that their work and personal responsibilities can coexist without excessive conflict or interference (Fisher et al., 2009). A favorable work-life balance has generally been associated with better psychological well-being and more positive work attitudes, whereas poor balance is often associated with burnout, exhaustion, and turnover intentions (Boamah & Laschinger, 2016).

The importance of WLB has become more evident in flexible and remote working arrangements because the physical boundary between work and personal life may become increasingly blurred. Shirmohammadi et al. (2022) emphasize that remote working creates both opportunities and challenges for work-life balance, depending on how employees and organizations manage work boundaries. Kismono et al. (2023) similarly examined work-life balance and job stress within a work-from-home context, reinforcing the relevance of these mechanisms in understanding employees' experiences during flexible work arrangements.

Previous empirical evidence also suggests that work-life balance is closely associated with job satisfaction and work stress. Rachmawati and Susanto (2024), for example, examined the relationship between work-life balance, work stress, and job satisfaction, while Henriques and Samagaio (2025) further demonstrated the relevance of work-life balance, stress, and job satisfaction within contemporary telework settings. These findings provide a basis for examining WLB as an important antecedent of both work stress and job satisfaction.

C. *Work Stress*

Work Stress refers to the physiological and psychological responses that occur when employees perceive that work-related demands exceed their available resources or coping capabilities (Lazarus & Folkman, 1984; Karasek, 1979). Organizational stressors may include excessive workload, role ambiguity, interpersonal conflict, inadequate resources, technological demands, and difficulties in balancing work and personal responsibilities. According to the Job Demands–Resources (JD-R) theory, high job demands

combined with insufficient job resources can result in strain, exhaustion, and reduced positive work outcomes (Bakker & Demerouti, 2017).

The relevance of work stress has increased in remote and technology-dependent work environments. Rahman and Singh (2024) highlighted the relationship between technostress, work-family conflict, and work exhaustion among post-pandemic remote workers, indicating that technology-enabled work can become a source of strain when employees have difficulty managing competing work and family demands. Conversely, flexible arrangements and an appropriate work-life balance may provide employees with greater resources to manage these demands.

Work stress is also closely connected with job satisfaction. Higher levels of persistent job demands and psychological strain may reduce employees' positive evaluation of their work and diminish their ability to experience satisfaction. Previous studies have documented the relevance of stress in explaining employee performance and job satisfaction outcomes (Karatepe et al., 2014; Mustika & Azzuhri, 2025). Thus, work stress is positioned in this study not merely as an outcome of WFH and WLB, but also as a psychological mechanism through which these work-related conditions may influence job satisfaction.

D. Job Satisfaction

Job Satisfaction refers to a positive emotional state resulting from an employee's evaluation of their job and work experiences (Luthans, 2011; Robbins & Judge, 2019). It reflects employees' perceptions of various aspects of work, including the nature of the job, supervision, relationships with colleagues, compensation, promotion opportunities, and working conditions. Job satisfaction may therefore be influenced by both intrinsic and extrinsic aspects of the work environment (Terera & Ngirande, 2014).

Job satisfaction is particularly important because it represents one of the central attitudinal outcomes in organizational behavior. Aras et al. (2025) emphasize the role of job satisfaction in connecting quality of work life with broader organizational outcomes such as commitment and job performance. Similarly, Hilman et al. (2022) examined the interrelationships among work-life balance, work stress, and job satisfaction, showing the relevance of job satisfaction within a broader mechanism connecting employees' work conditions and work outcomes.

Within the context of flexible work arrangements, job satisfaction may be shaped by employees' perceptions of autonomy, balance, organizational support, and psychological strain. Therefore, understanding job satisfaction requires attention not only to the direct effects of WFH and WLB, but also to psychological mechanisms such as work stress that may help explain how these work conditions are translated into employees' attitudes toward their jobs.

E. Conceptual Framework and Hypothesis Development

The conceptual framework of this study is grounded primarily in the Job Demands–Resources (JD-R) theory (Bakker & Demerouti, 2017) and the stress appraisal theory of Lazarus and Folkman (1984). From the JD-R perspective, working arrangements such as WFH and WLB may function as job resources when they provide employees with flexibility, autonomy, and greater control over work demands. However, these arrangements may also generate additional demands when work boundaries become unclear or technological and coordination requirements become excessive. Stress appraisal theory further explains that employees' psychological responses depend on how they perceive and evaluate the demands and resources associated with their work.

1) Work From Home and Job Satisfaction

WFH can provide employees with greater autonomy, flexibility, and reduced commuting demands, which may improve their overall evaluation of work. Previous research on telecommuting has shown that increased autonomy and flexibility can contribute to favorable employee outcomes (Gajendran & Harrison, 2007; Allen et al., 2015). In the post-pandemic context, the ability to manage work more flexibly may therefore contribute to higher job satisfaction when employees perceive WFH arrangements as supportive and manageable. Based on this reasoning, the following hypothesis is proposed:

H1: Work From Home has a positive and significant effect on Job Satisfaction.

2) Work-Life Balance and Job Satisfaction

Employees who are able to maintain a satisfactory balance between professional and personal responsibilities are more likely to evaluate their work experiences positively. WLB can reduce conflict between work and non-work roles and support employees' psychological well-being (Greenhaus et al., 2003; Fisher et al., 2009). Recent evidence also highlights the relevance of WLB in explaining job satisfaction in contemporary work settings (Rachmawati & Susanto, 2024; Henriques & Samagaio, 2025). Accordingly:

H2: Work-Life Balance has a positive and significant effect on Job Satisfaction.

3) Work From Home and Work Stress

From a JD-R perspective, WFH may reduce certain job demands, particularly commuting time and rigid spatial requirements, while providing greater autonomy over how work is performed. When adequately supported, these resources may reduce employees' perceived work pressure. However, remote work may also

generate stress when technological requirements, isolation, or work-family interference become excessive (Shirmohammadi et al., 2022; Rahman & Singh, 2024). In the present model, WFH is expected to function predominantly as a work resource and therefore to reduce work stress:

H3: Work From Home has a negative and significant effect on Work Stress.

4) Work-Life Balance and Work Stress

Work-life balance enables employees to allocate time, energy, and psychological resources more effectively across professional and personal responsibilities. When employees perceive that these domains are balanced, work-family conflict and psychological strain are expected to decrease. Conversely, poor work-life balance can intensify competing role demands and increase stress. Evidence from contemporary flexible-work settings reinforces the importance of WLB in understanding employees' stress experiences (Kismono et al., 2023; Rachmawati & Susanto, 2024). Therefore:

H4: Work-Life Balance has a negative and significant effect on Work Stress.

5) Work Stress and Job Satisfaction

According to stress appraisal theory, employees who perceive work demands as exceeding their coping resources are more likely to experience psychological strain, which can negatively influence their attitudes toward work. Persistent work stress may reduce positive emotional experiences, diminish engagement, and lower employees' satisfaction with their jobs. This relationship is consistent with research emphasizing the adverse consequences of excessive work stress for work-related outcomes (Karatepe et al., 2014; Mustika & Azzuhri, 2025). Accordingly:

H5: Work Stress has a negative and significant effect on Job Satisfaction.

6) The Mediating Role of Work Stress

The relationships described above suggest that WFH and WLB may influence job satisfaction not only directly but also indirectly through work stress. Under the JD-R framework, flexible work arrangements and an appropriate work-life balance may increase employees' available resources or reduce competing job demands. Reduced psychological strain may subsequently contribute to more favorable evaluations of work. Thus, work stress provides a plausible psychological mechanism linking working conditions with job satisfaction.

In the case of WFH, flexible work arrangements may reduce commuting burden and provide greater autonomy, thereby lowering work stress and contributing to higher job satisfaction. This indirect pathway is consistent with the theoretical proposition that job resources influence work outcomes partly through employees' psychological experiences.

H6: Work Stress mediates the relationship between Work From Home and Job Satisfaction.

Similarly, employees with higher work-life balance may experience lower conflict between professional and personal responsibilities, resulting in reduced work stress and, consequently, higher job satisfaction. Previous studies examining work-life balance, job stress, and work-related outcomes provide support for this mechanism (Kismono et al., 2023; Hilman et al., 2022).

H7: Work Stress mediates the relationship between Work-Life Balance and Job Satisfaction.

The conceptual framework presented in **Figure 1** positions Work From Home and Work-Life Balance as independent variables, Work Stress as the mediating variable, and Job Satisfaction as the dependent variable. WFH and WLB are proposed to influence Job Satisfaction both directly and indirectly through Work Stress.

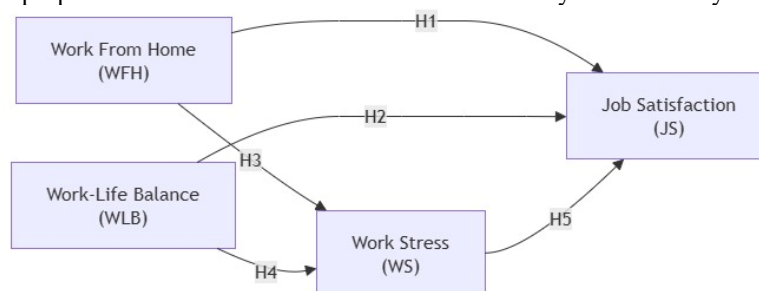


Figure 1. Conceptual Framework

3. RESEARCH METHOD

A. Research Design

This study employed a quantitative research design using a cross-sectional survey approach. Data were collected through a structured questionnaire developed by adapting measurement indicators from established literature. The study adopted a positivist approach to empirically examine the hypothesized relationships among Work From Home (WFH), Work-Life Balance (WLB), Work Stress, and Job Satisfaction (Sugiyono, 2019). Data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM)

with SmartPLS 4.0. PLS-SEM was considered appropriate for estimating the proposed structural relationships, including the indirect effects involving Work Stress as a mediating variable (Hair et al., 2019).

B. Population and Sample

The population of this study comprised all 72 employees of the Regional Development Planning Agency (Bappeda) of South Tapanuli Regency. Given the relatively small and accessible population, a saturated sampling technique, or census approach, was employed, whereby all members of the population were included as respondents (Sugiyono, 2019). A total of 72 questionnaires were returned and included in the analysis, resulting in a final sample of 72 respondents.

C. Research Instrument

Data were collected using a structured questionnaire consisting of four measurement constructs. Work From Home (WFH) was measured using five items adapted from Purwanto et al. (2020) and Fadillah and Wolor (2020), covering aspects related to work flexibility, technological support, and the implementation of work responsibilities from home. Work-Life Balance (WLB) was measured using five items adapted from Greenhaus et al. (2003) and Santos and Garibaldi de Hilal (2020), reflecting the balance of time, energy, and involvement between work and personal life. Work Stress was measured using five items based on Lazarus and Folkman (1984) and Karasek (1979), addressing psychological pressure, role demands, and work-related strain. Job Satisfaction was measured using six items based on Luthans (2011) and Robbins and Judge (2019), covering satisfaction with the work itself, supervision, coworkers, compensation, promotion opportunities, and working conditions. All items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

D. Data Analysis Technique

Data analysis was conducted using the two-stage PLS-SEM evaluation procedure described by Hair et al. (2019). The first stage involved evaluating the measurement model (outer model) to assess indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. Indicator reliability was assessed using outer loadings, with values of 0.70 or higher used as the primary criterion. Internal consistency reliability was evaluated using Cronbach's alpha and Composite Reliability (CR), with values of 0.70 or higher considered acceptable. Convergent validity was assessed using the Average Variance Extracted (AVE), with a threshold of 0.50 or higher. Discriminant validity was evaluated using the Heterotrait-Monotrait Ratio (HTMT), with values below 0.85 indicating adequate discriminant validity (Hair et al., 2019; Henseler et al., 2015).

The second stage involved evaluating the structural model (inner model) by examining the coefficient of determination (R^2), path coefficients, and the statistical significance of the hypothesized direct and indirect relationships. Hypothesis testing was conducted using a bootstrapping procedure with 5,000 resamples and a two-tailed significance level of 5% ($p < 0.05$). The mediating role of Work Stress was assessed through the significance of the specific indirect effects of WFH and WLB on Job Satisfaction through Work Stress.

4. RESULTS AND DISCUSSION

A. Respondent Characteristics

Table 1 presents the demographic characteristics of the 72 respondents included in the study. The majority of respondents were female, representing 56.9% of the sample ($n = 41$), while male respondents accounted for 43.1% ($n = 31$). In terms of age, the largest group was aged 31–40 years (37.5%; $n = 27$), followed by those aged 41–50 years (27.8%; $n = 20$), 20–30 years (25.0%; $n = 18$), and above 50 years (9.7%; $n = 7$).

Most respondents held a bachelor's degree (55.6%; $n = 40$), followed by a master's degree (18.0%; $n = 13$), a diploma qualification (15.3%; $n = 11$), and senior high school or equivalent education (11.1%; $n = 8$). Regarding length of service, 33.3% of respondents had worked for 5–10 years, 30.6% for 11–20 years, 20.8% for less than five years, and 15.3% for more than 20 years. Most respondents were civil servants (80.6%; $n = 58$), while the remaining 19.4% ($n = 14$) were non-civil-service or contract employees.

Table 1. Demographic Profile of Respondents

Category	Classification	n	%
Gender	Male	31	43.1
	Female	41	56.9
	Total	72	100.0
Age	20–30 years	18	25.0
	31–40 years	27	37.5
	41–50 years	20	27.8
	> 50 years	7	9.7
	Total	72	100.0
Education	Senior High School/Equivalent	8	11.1
	Diploma (D3)	11	15.3
	Bachelor's Degree (S1)	40	55.6

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Category	Classification	n	%
Years of Service	Master's Degree (S2)	13	18.0
	Total	72	100.0
	< 5 years	15	20.8
	5–10 years	24	33.3
	11–20 years	22	30.6
	> 20 years	11	15.3
Employment Status	Total	72	100.0
	Civil Servant (PNS)	58	80.6
	Non-PNS/Contract	14	19.4
	Total	72	100.0

B. Measurement Model Assessment (Outer Model)

The measurement model was evaluated by examining indicator reliability, internal consistency reliability, convergent validity, and discriminant validity. As presented in Table 2, all indicator outer loadings exceeded the recommended threshold of 0.70, ranging from 0.773 to 0.862. Cronbach's alpha values ranged from 0.876 to 0.904, while Composite Reliability (CR) values ranged from 0.908 to 0.926, exceeding the minimum criterion of 0.70. The Average Variance Extracted (AVE) values ranged from 0.613 to 0.675, all of which were above the recommended threshold of 0.50. These results indicate adequate indicator reliability, internal consistency reliability, and convergent validity for all constructs.

Table 2. Measurement Model Assessment Results

Construct	Indicator	Outer Loading	Cronbach's α	CR	AVE
Work From Home (WFH)	WFH1	0.781	0.876	0.908	0.613
	WFH2	0.812			
	WFH3	0.796			
	WFH4	0.773			
	WFH5	0.804			
Work-Life Balance (WLB)	WLB1	0.802	0.889	0.918	0.651
	WLB2	0.831			
	WLB3	0.819			
	WLB4	0.787			
	WLB5	0.845			
Work Stress (SK)	SK1	0.826	0.882	0.912	0.638
	SK2	0.798			
	SK3	0.811			
	SK4	0.839			
	SK5	0.783			
Job Satisfaction (KK)	KK1	0.843	0.904	0.926	0.675
	KK2	0.817			
	KK3	0.829			
	KK4	0.851			
	KK5	0.862			
	KK6	0.798			

Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT) criterion (Henseler et al., 2015). As shown in Table 3, all HTMT values were below the conservative threshold of 0.85. The highest HTMT value was 0.739, indicating that the constructs demonstrated adequate discriminant validity and were empirically distinguishable from one another.

Table 3. Discriminant Validity Assessment Using HTMT

Construct	WFH	WLB	SK	KK
Work From Home (WFH)	—			
Work-Life Balance (WLB)	0.712	—		
Work Stress (SK)	0.648	0.701	—	
Job Satisfaction (KK)	0.683	0.739	0.695	—

C. Structural Model Assessment (Inner Model)

The explanatory power of the structural model was evaluated using the coefficient of determination (R^2). As shown in Table 4, Work Stress had an R^2 value of 0.583 and an adjusted R^2 value of 0.571, indicating that WFH and WLB jointly explained 58.3% of the variance in Work Stress. Job Satisfaction had an R^2 value of 0.712 and an adjusted R^2 value of 0.695, indicating that WFH, WLB, and Work Stress collectively explained 71.2% of the variance in Job Satisfaction.

These results indicate that the proposed model explains a considerable proportion of the variance in both endogenous constructs, particularly Job Satisfaction.

Table 4. Coefficient of Determination (R^2)

Endogenous Construct	R^2	Adjusted R^2
Work Stress (SK)	0.583	0.571
Job Satisfaction (KK)	0.712	0.695

D. Hypothesis Testing: Direct Effects

The direct effects were evaluated using a bootstrapping procedure with 5,000 resamples. As presented in Table 5, all five direct-effect hypotheses (H1–H5) were statistically supported at the 5% significance level.

Table 5. Path Coefficients and Hypothesis Testing: Direct Effects

Hypothesis / Path	β	Mean	STDEV	t-statistic	p-value	Decision
H1: WFH $\rightarrow$ KK	0.267	0.271	0.113	2.363	0.021	Supported
H2: WLB $\rightarrow$ KK	0.341	0.345	0.118	2.890	0.004	Supported
H3: WFH $\rightarrow$ SK	-0.312	-0.318	0.117	2.667	0.009	Supported
H4: WLB $\rightarrow$ SK	-0.389	-0.391	0.124	3.137	0.002	Supported
H5: SK $\rightarrow$ KK	-0.298	-0.302	0.114	2.614	0.011	Supported

WFH had a positive and statistically significant relationship with Job Satisfaction ($\beta = 0.267$, $t = 2.363$, $p = 0.021$), supporting H1. Similarly, WLB had a positive and significant relationship with Job Satisfaction ($\beta = 0.341$, $t = 2.890$, $p = 0.004$), supporting H2.

WFH was negatively and significantly associated with Work Stress ($\beta = -0.312$, $t = 2.667$, $p = 0.009$), supporting H3. WLB also showed a negative and statistically significant relationship with Work Stress ($\beta = -0.389$, $t = 3.137$, $p = 0.002$), supporting H4. Finally, Work Stress was negatively and significantly associated with Job Satisfaction ($\beta = -0.298$, $t = 2.614$, $p = 0.011$), supporting H5.

E. Hypothesis Testing: Indirect Effects and Mediation

The mediating role of Work Stress was evaluated using the significance of the specific indirect effects. As presented in Table 6, both mediation hypotheses were statistically supported.

Table 6. Indirect Effects and Mediation Testing

Hypothesis / Path	β	Mean	STDEV	t-statistic	p-value	Decision
H6: WFH $\rightarrow$ SK $\rightarrow$ KK	0.093	0.096	0.043	2.163	0.031	Supported
H7: WLB $\rightarrow$ SK $\rightarrow$ KK	0.116	0.119	0.049	2.367	0.018	Supported

The indirect effect of WFH on Job Satisfaction through Work Stress was positive and statistically significant ($\beta = 0.093$, $t = 2.163$, $p = 0.031$), supporting H6. Because the direct relationship between WFH and Job Satisfaction remained statistically significant, Work Stress demonstrated partial mediation in this relationship.

Similarly, the indirect effect of WLB on Job Satisfaction through Work Stress was positive and statistically significant ($\beta = 0.116$, $t = 2.367$, $p = 0.018$), supporting H7. Since the direct relationship between WLB and Job Satisfaction also remained statistically significant, Work Stress partially mediated the relationship between WLB and Job Satisfaction.

The positive signs of the two indirect effects are theoretically consistent with the negative relationships between WFH/WLB and Work Stress and the negative relationship between Work Stress and Job Satisfaction. In other words, higher WFH and WLB scores were associated with lower Work Stress, which in turn was associated with higher Job Satisfaction.

F. Discussion

The findings provide empirical evidence regarding the direct and indirect relationships among Work From Home, Work-Life Balance, Work Stress, and Job Satisfaction in the context of a local government institution. Overall, the results support the proposed conceptual framework and indicate that flexible working arrangements and employees' ability to balance work and personal responsibilities are associated with job satisfaction both directly and indirectly through work stress.

The positive relationship between WFH and Job Satisfaction (H1) suggests that more favorable perceptions of WFH arrangements are associated with higher job satisfaction among employees. This finding is consistent with the broader telework literature, which suggests that remote working arrangements may provide greater autonomy and flexibility while reducing commuting demands (Gajendran & Harrison, 2007; Allen et al., 2015). Shirmohammadi et al. (2022) also emphasize that remote work can provide meaningful benefits for employees when work-life boundaries and organizational support are managed effectively. In the context of Bappeda South Tapanuli Regency, the result should therefore be interpreted as indicating that employees who perceived WFH arrangements more favorably also tended to report higher job satisfaction. It does not necessarily demonstrate that a particular formal WFH policy was universally well received, because the present study did not separately evaluate employees' satisfaction with the institutional WFH policy itself.

The positive relationship between WLB and Job Satisfaction (H2) further supports the argument that employees' ability to balance professional and personal responsibilities is closely associated with positive work attitudes. Employees who experience greater compatibility between work and non-work domains are more likely to maintain psychological resources and evaluate their work experiences positively (Greenhaus et al.,

2003; Fisher et al., 2009). Recent empirical studies similarly indicate that work-life balance is closely related to job satisfaction and other employee outcomes (Rachmawati & Susanto, 2024; Henriques & Samagaio, 2025). This relationship is particularly relevant in public-sector organizations, where administrative responsibilities, deadlines, and bureaucratic processes may create periods of intensive workload. Supporting employees' ability to maintain work-life balance may therefore contribute to more favorable job attitudes.

The results also revealed negative relationships between WFH and Work Stress (H3) and between WLB and Work Stress (H4). These findings are consistent with the Job Demands–Resources framework, which proposes that work arrangements that enhance autonomy, flexibility, and control can function as resources that help employees manage work demands (Bakker & Demerouti, 2017). Remote work, however, does not automatically reduce stress. Shirmohammadi et al. (2022) emphasize that remote work may simultaneously provide flexibility and create work-life boundary challenges, while Rahman and Singh (2024) highlight the role of technostress and work-family conflict among post-pandemic remote workers. Thus, the negative association identified in the present study suggests that more favorable perceptions of WFH and WLB were associated with lower perceived work stress within the Bappeda sample.

The standardized path coefficient from WLB to Work Stress ($\beta = -0.389$) was greater in absolute magnitude than the coefficient from WFH to Work Stress ($\beta = -0.312$). Within this model, this suggests that WLB showed a relatively stronger association with reduced work stress than WFH. This difference should not be interpreted as evidence that WLB is universally more important than WFH, but it indicates that employees' ability to balance professional and personal responsibilities may represent a particularly relevant psychological resource in the observed organizational context.

The negative relationship between Work Stress and Job Satisfaction (H5) indicates that employees reporting higher levels of work stress tended to report lower job satisfaction. Persistent psychological pressure can deplete employees' emotional and cognitive resources and reduce their ability to experience positive attitudes toward their jobs. This interpretation is consistent with stress-appraisal theory (Lazarus & Folkman, 1984) and with contemporary evidence emphasizing the relevance of work stress to employee attitudes and performance outcomes (Mustika & Azzuhri, 2025; Rachmawati & Susanto, 2024). The finding reinforces the importance of work stress management as part of human resource practices in public-sector organizations.

The mediation results provide an additional explanation of how WFH and WLB are associated with Job Satisfaction. Work Stress partially mediated the relationship between WFH and Job Satisfaction (H6) and between WLB and Job Satisfaction (H7). These findings indicate that part of the positive association between WFH/WLB and Job Satisfaction operates through lower levels of Work Stress. In other words, employees who perceive greater flexibility or better work-life balance may experience lower psychological strain, which is subsequently associated with more positive evaluations of their jobs. The results are consistent with the broader mechanism proposed by the JD-R framework, in which work resources can contribute to favorable employee outcomes partly by reducing strain.

The indirect effect of WLB on Job Satisfaction through Work Stress ($\beta = 0.116$) was numerically greater than the indirect effect of WFH ($\beta = 0.093$). This finding suggests that the stress-reduction pathway may be relatively more pronounced for WLB within the present sample. Related evidence from Kismono et al. (2023) also highlights the interrelationships among WFH, work-life balance, job stress, and employee well-being, while Hilman et al. (2022) demonstrate the importance of work-life balance, work stress, and job satisfaction within an organizational performance framework. Nevertheless, because the direct effects of both WFH and WLB on Job Satisfaction remained statistically significant, Work Stress represents one important mechanism rather than the sole mechanism connecting these work conditions with Job Satisfaction.

The findings also have practical implications for human resource management within local government institutions. Rather than focusing exclusively on the availability of flexible work arrangements, organizations should consider whether employees have adequate resources to manage those arrangements effectively. Bappeda may therefore benefit from strengthening clear work expectations, digital and technical support, communication mechanisms, and workload coordination associated with flexible work. In addition, work-life balance can be supported through reasonable scheduling, supportive supervisory practices, appropriate leave arrangements, and greater attention to boundaries between work and personal responsibilities. Stress-management initiatives, including workload monitoring, access to organizational support, and supportive communication among supervisors and colleagues, may further contribute to more favorable employee experiences.

Finally, these results should be interpreted within the specific characteristics of a local government organization. Public-sector employees operate within formal administrative structures, regulatory requirements, public accountability mechanisms, and institutional procedures that may differ considerably from private-sector or fully remote organizations. Consequently, the relationships observed in this study should not automatically be generalized to all organizational settings. This contextual distinction strengthens the

contribution of the present study by providing evidence regarding flexible work, work-life balance, stress, and job satisfaction within a local-government environment.

5. CONCLUSION

This study empirically examined the effects of Work From Home (WFH) and Work-Life Balance (WLB) on Job Satisfaction, with Work Stress acting as a mediating variable among employees of the Regional Development Planning Agency (Bappeda) of South Tapanuli Regency. Using PLS-SEM analysis with a census sample of 72 respondents, the study found that WFH had a positive and significant relationship with Job Satisfaction, while WLB also showed a positive and significant relationship with Job Satisfaction. In addition, WFH and WLB were both negatively and significantly associated with Work Stress, whereas Work Stress was negatively associated with Job Satisfaction. The mediation analysis further showed that Work Stress partially mediated the relationship between WFH and Job Satisfaction as well as the relationship between WLB and Job Satisfaction. The structural model explained 71.2% of the variance in Job Satisfaction, indicating considerable explanatory power within the context of the present study.

These findings contribute to the growing literature on flexible work arrangements, work-life balance, and employee well-being in the Indonesian public sector by highlighting the mediating role of Work Stress. The results suggest that favorable perceptions of WFH and higher levels of WLB are associated with greater Job Satisfaction partly because they are also associated with lower levels of Work Stress. From a practical perspective, Bappeda South Tapanuli Regency may benefit from strengthening organizational support for flexible work arrangements, promoting policies and practices that support work-life balance, and implementing appropriate mechanisms for managing employee stress. Such efforts may include clearer work expectations, adequate technological support, supportive supervision, workload monitoring, and organizational practices that help employees maintain boundaries between work and personal responsibilities.

The findings should nevertheless be interpreted in light of several limitations. First, the cross-sectional design limits the ability to draw strong causal conclusions regarding the relationships among WFH, WLB, Work Stress, and Job Satisfaction. Second, the study was conducted within a single local government institution, which may limit the generalizability of the findings to other organizational contexts. Future research is therefore encouraged to employ longitudinal designs, include multiple public-sector institutions, and examine additional mediating or moderating variables, such as employee engagement, perceived organizational support, leadership style, or digital competence. Such extensions may provide a more comprehensive understanding of the factors influencing Job Satisfaction in public-sector organizations.

REFERENCES

- Allen, T. D., Golden, T. D., & Shockley, K. M. (2015). How effective is telecommuting? Assessing the status of our scientific findings. *Psychological Science in the Public Interest*, 16(2), 40–68. <https://doi.org/10.1177/1529100615593273>
- Aras, Y., Avcı, K., & Goktas, M. (2025). The mediating role of job satisfaction in the impact of quality of work life on organizational commitment and job performance. *Journal of Health Organization and Management*, 1–17. <https://doi.org/10.1108/JHOM-04-2025-0190>
- Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
- Boamah, S. A., & Laschinger, H. (2016). The influence of areas of worklife fit and work-life interference on burnout and turnover intentions among new graduate nurses. *Journal of Nursing Management*, 24(2), E164–E174. <https://doi.org/10.1111/jonm.12318>
- Chung, H., Birkett, H., Forbes, S., & Seo, H. (2021). COVID-19, flexible working, and implications for gender equality in the United Kingdom. *Gender & Society*, 35(2), 218–232. <https://doi.org/10.1177/08912432211001304>
- Fadillah, N., & Wolor, C. W. (2020). Effectiveness of e-training, e-leadership, and work life balance on employee performance during COVID-19. *Journal of Asian Finance, Economics and Business*.
- Fisher, G. G., Bulger, C. A., & Smith, C. S. (2009). Beyond work and family: A measure of work/nonwork interference and enhancement. *Journal of Occupational Health Psychology*, 14(4), 441–456. <https://doi.org/10.1037/a0016737>
- Gajendran, R. S., & Harrison, D. A. (2007). The good, the bad, and the unknown about telecommuting: Meta-analysis of psychological mediators and individual consequences. *Journal of Applied Psychology*, 92(6), 1524–1541. <https://doi.org/10.1037/0021-9010.92.6.1524>
- Greenhaus, J. H., Collins, K. M., & Shaw, J. D. (2003). The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, 63(3), 510–531. [https://doi.org/10.1016/S0001-8791\(02\)00042-8](https://doi.org/10.1016/S0001-8791(02)00042-8)
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Henriques, C. S., & Samagaio, A. (2025). Impact of stress, job satisfaction, work–life balance and telework on auditors' job performance: A PLS-SEM and fsQCA approach. *Journal of Organizational Effectiveness: People and Performance*, 12(2), 328–350. <https://doi.org/10.1108/JOEPP-03-2024-0135>

- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Hilman, H., Edward, Y. R., & Faris, S. (2022). The effect of work life balance and work stress on performance with job satisfaction as intervening variables at the office of the Ministry of Religion, Selatan Tapanuli Regency. *International Journal of Science, Technology & Management*, 3(5), 1321–1328.
- Karasek, R. A., Jr. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24(2), 285–308. <https://doi.org/10.2307/2392498>
- Karatepe, O. M., Beirami, E., Bouzari, M., & Safavi, H. P. (2014). Does work engagement mediate the effects of challenge stressors on job outcomes? Evidence from the hotel industry. *International Journal of Hospitality Management*, 36, 14–22. <https://doi.org/10.1016/j.ijhm.2013.08.003>
- Khan, N., Aslam, R., Asad, M. M., Oad, L., & Almusharraf, N. M. (2022). Effects of WFH on educators' wellbeing: Mediating role of institutional head's support and moderating role of employees' self-efficacy at university level. *Journal of Professional Capital and Community*, 7(3), 305–326. <https://doi.org/10.1108/JPC-10-2021-0063>
- Kismono, G., Paramita, W., & Lintang, G. B. (2023). Can acceptance promote life satisfaction during a work from home regime? The mediating role of work-life balance and job stress. *Cogent Business & Management*, 10(2), 2234130. <https://doi.org/10.1080/23311975.2023.2234130>
- Kossek, E. E., & Lautsch, B. A. (2018). Work-life flexibility for whom? Occupational status and work-life inequality in upper, middle, and lower level jobs. *Academy of Management Annals*, 12(1), 5–36. <https://doi.org/10.5465/annals.2016.0059>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
- Luthans, F. (2011). *Organizational behavior: An evidence-based approach* (12th ed.). McGraw-Hill/Irwin.
- Mungkasa, O. (2020). Bekerja dari rumah (working from home/WFH): Menuju tatanan baru era pandemi COVID-19. *The Indonesian Journal of Development Planning*, 4(2), 126–150. <https://doi.org/10.36574/jpp.v4i2.119>
- Mustika, Y. A., & Azzuhri, M. (2025). Influence of physical work environment and stress on employee performance: The crucial role of job satisfaction. *Jurnal Kewirausahaan dan Inovasi*, 4(2), 587–609.
- Purwanto, A., Asbari, M., Fahlevi, M., Mufid, A., Agistiawati, E., Cahyono, Y., & Suryani, P. (2020). Impact of work from home (WFH) on Indonesian teachers performance during the COVID-19 pandemic: An exploratory study. *International Journal of Advanced Science and Technology*, 29(5), 6235–6244.
- Rachmawati, A., & Susanto, A. H. (2024). Pengaruh work-life balance dan stres kerja terhadap kepuasan kerja pegawai startup PT. XYZ. *Jurnal Manajemen dan Bisnis Madani*, 6(2), 1–15. <https://doi.org/10.51353/jmbm.v6i2.967>
- Rahman, H., & Singh, T. (2024). Technostress and work exhaustion: Unravelling the mediating role of work-family conflict in post-pandemic remote workers. *International Journal of Applied Management Science*, 16(3), 261–277. <https://doi.org/10.1504/IJAMS.2024.140043>
- Robbins, S. P., & Judge, T. A. (2019). *Organizational behavior* (18th ed.). Pearson Education.
- Santos, C., & Garibaldi de Hilal, A. V. (2020). The work-life interface and the role of HR: Employee experiences in Brazil. *Community, Work & Family*, 23(4), 439–456. <https://doi.org/10.1080/13668803.2018.1547270>
- Shamir, B., & Salomon, I. (1985). Work-at-home and the quality of working life. *Academy of Management Review*, 10(3), 455–464. <https://doi.org/10.5465/amr.1985.4278957>
- Shirmohammadi, M., Au, W. C., & Beigi, M. (2022). Remote work and work-life balance: Lessons learned from the COVID-19 pandemic and suggestions for HRD practitioners. *Human Resource Development International*, 25(2), 163–181. <https://doi.org/10.1080/13678868.2022.2047380>
- Sugiyono. (2019). *Metode penelitian kuantitatif, kualitatif, dan R&D*. Alfabeta.
- Terera, S. R., & Ngirande, H. (2014). The impact of rewards on job satisfaction and employee retention. *Mediterranean Journal of Social Sciences*, 5(1), 481–487. <https://doi.org/10.5901/mjss.2014.v5n1p481>